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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,828	09/28/2001	Walid Ahmed	26-3-22-1-1	5009

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Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Road
Holmdel, NJ 07733-3030

EXAMINER

VU, THAI

ART UNIT	PAPER NUMBER
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2643

6

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/966,828

Applicant(s)

AHMED ET AL.

Examiner

Thai Vu

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4 and 5 is/are rejected.
- 7) ☒ Claim(s) 6-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palenius et al. (PAT US 6,732,302,B1 filed 09-08-2000, hereinafter Palenius) in view of Shiu et al (US 2003/0036403 A1 filed 08-20-2001, hereinafter Shiu) and Ariel et al. (filed 02-05-2001, hereinafter Ariel).

Regarding claim 1, Palenius teaches the following:

A method of format detection for information received over a communication System (column 1 line 54-55), the method comprising the step of:

determining the format of the received information by decoding received information extracted from a defined guiding channel [guiding channel reads on first transport channel] (claim 5, lines 43-45) whereby information size values obtained from a defined list of size values for the guiding channel are used in the decoding [method is designed as 3GPP qualified, thus frame width is predefined – *list of size values* read on *predefined lengths*] (column 1 lines 51-52) wherein the step of determining the format comprises the steps of:

extracting received information from other channels of the communications systems (FIG. 6 blocks 609 and 623; column 1 lines 56-60; column 7 lines 13-15);

performing decoding operations on the extracted guiding channel information M times [the decoding process is repeated a number of times, until a correct CRC is found] (column 1 lines 59-67)

deciding which of the M decoding operations resulted in a correct decode (column 1 line 57- column 2 line 2); and

determining the format [reads on lengths of A, B and C being known] of the received information from the information size value of the guiding channel that yielded the correct decode (column 2 lines 4-12).

Where in the step of deciding which of the M decoding operations resulted in a correct code comprises the steps of:

Performing at least one decode operation on the extracted guiding channel information yielding at least one decode result (column 1 lines 57-60); and

Applying the at least one decode result to an algorithm for deciding whether there is a correct decode and which information size value yielded such correct decode (column 1 lines 60-64),

Wherein the communication system is a 3GPP compliant UMTS [reads on W-CDMA. UMTS is also known as W-CDMA] (column 1 lines 17-19) where the guiding channel is TrCh1 [reads on A-field, A-field is the first to be decoded, others are processed based on data collected from A] (FIG. 3 block 105, column 2 lines 3-12)

Palenius teaches CRC decoding (FIG. 4 boxes 405, 413; column 5 lines 32-35; lines 47-49)

Palenius does not teach M is an integer that represents a total number of information size values in the said list, and also does not teach the decoding operations comprise convolutional decoding yielding a result on which a tail bit test and CRC decoding are performed wherein each such operation is performed M times.

However, Shiu teaches a system using more than one transport formats and all transport format are determined which teach M [reads on N] is an integer that represents a total number of information size values in the list (paragraph [0007], paragraph [00089], FIG. 7 block 716), and Ariel teaches blind detection may be applied with convolutional coding in combination with CRC which decoding operations comprise convolutional decoding yielding a result on which a tail bit test [tail bits are introduced by convolution coding] and CRC decoding are performed (page 1 paragraphs [0011]-[0015]).

Thus it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Palenius invention to provide the following: performing decoding operations M times wherein M is an integer that represents a total number of information size values as taught by Shiu, and to use convolutional decoding yielding a result on which a tail bit test and CRC decoding are performed as taught by Ariel, as the arrangement would help a communication system to detect all false "correct" detections, thus possibility of detecting a wrong format is narrowed down.

Regarding claim 5, Palenius teaches the following: the format being determined are transport formats of TrCh2 and TrCh3 based on a format detected for TrCh1 (Abstract, FIG 5, column 2 lines 10-12).

Allowable Subject Matter

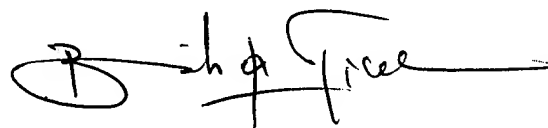
3. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Vu whose telephone number is 703-305-3417. The examiner can normally be reached on 9:00AM-6:00PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-3900. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thai Vu
Examiner
Art Unit 2643


BINH TIEU
PRIMARY EXAMINER